



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

FERNALD _____
LOG C-1583

2002 JUL 26 A 9:42

FILE: 6446.251

REPLY TO THE ATTENTION OF:

LFRATV _____

JUL 25 2002

Mr. Johnny W. Reising
United States Department of Energy
Feed Materials Production Center
P.O. Box 398705
Cincinnati, Ohio 45239-8705

SRF-5J

RE: Waste Pit 4 Cap
Excavation Plan

Dear Mr. Reising:

The United States Environmental Protection Agency (U.S. EPA) has completed its review of the United States Department of Energy's (U.S. DOE) Waste Pit 4 cap excavation implementation plan.

The plan provides a sampling and excavation approach to the Waste Pit 4 cap to potentially be disposed in the On-Site Disposal Facility (OSDF) as proposed by U.S. DOE.

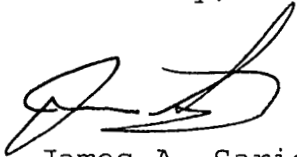
The action to dispose of the Waste Pit 4 cap in the OSDF would violate the existing Operable Unit 1 Record of Decision (ROD). Disposal of the cap materials in the OSDF would require a regulatory post-ROD change. Therefore, U.S. EPA can not approve the proposed Waste Pit 4 cap excavation plan, as the document is inconsistent with the OU 1 ROD.

Further, U.S. EPA has several comments on the sampling approach and U.S. DOE's determination that the cap materials are below the OSDF waste acceptance criteria. Also, additional justification that the Waste Pit 4 cap contents will not be required for blending with other pit materials must be provided.

Therefore, U.S. EPA disapproves the Waste Pit 4 cap excavation implementation plan. U.S. DOE must submit responses to comments and a revised excavation plan adequately addressing U.S. EPA's enclosed comments within (30) thirty days receipt of this letter.

Please contact me at (312) 886-0992 if you have any questions regarding this matter.

Sincerely,



James A. Saric
Remedial Project Manager
Federal Facilities Section
SFD Remedial Response Branch #2

Enclosure

cc: Tom Schneider, OEPA-SWDO
Sally Robison, U.S. DOE-HDQ
Jamie Jameson, Fluor Fernald
Terry Hagen, Fluor Fernald
Tim Poff, Fluor Fernald

bcc w/enclosure:

Mary Wojciechowski, Tetra Tech
Gene Jablonowski SRF-5J

bcc w/o enclosure:

Brian Barwick, ORC

TECHNICAL REVIEW COMMENTS ON
"WASTE PIT 4 CAP EXCAVATION IMPLEMENTATION PLAN"

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

GENERAL COMMENT

Commenting Organization: U.S. EPA Commentor: Saric
Section #: Not Applicable (NA) Page #: NA Line #: NA
General Comment #: 1

Comment: The analytical data presented in Appendix A of the plan do not allow full characterization of uranium concentrations in the cap and do not support the proposed cap excavation depth of 3.5 feet below ground surface (bgs). At borings 23140, 23142, 23143, 23144, 23146, and 23150, there are no total uranium data at or below 3.5 feet bgs that are below the 1,030-part-per-million (ppm) waste acceptance criteria (WAC) limit for the On-Site Disposal Facility (OSDF). As a result, excavation of the cap in these areas to 3.5 feet bgs could potentially remove soil with total uranium concentrations above the WAC limit of 1,030 ppm. Additional confirmation soil samples should be collected from proposed excavation areas from 3 to 4 feet bgs to verify that cap material to be excavated will not contain total uranium concentrations exceeding the WAC limit of 1,030 ppm.

SPECIFIC COMMENTS

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 4.0 Page #: 9 Lines #: 13,14, and 15
Original Specific Comment #: 1

Comment: The text states that at borings 23140, 23144, and 23150, the interface is identified by an above-WAC total uranium result without an associated below-WAC total uranium result at the maximum proposed excavation depth of 3.5 feet bgs. However, data in Appendix A indicate that there also are no associated below-WAC total uranium results at the maximum proposed excavation depth of 3.5 feet bgs for borings 23142, 23143, and 23146. The text should be revised to discuss all borings with no associated below-WAC total uranium results at the maximum proposed excavation depth of 3.5 feet bgs.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 4.0 Page #: 9 Line #: 21
Original Specific Comment #: 2

Comment: Regarding borings 23140, 23144, and 23150, the text states that soil intervals overlying intervals with above-WAC results should contain in situ uranium concentrations below 1,030 ppm. As stated in General Comment 1 above, confirmation soil samples should be collected at 3 to 4 feet bgs to verify that cap material to be excavated will

not contain total uranium concentrations exceeding the WAC limit of 1,030 ppm.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 5.0

Page #: 12

Lines #: 7 and 8

Original Specific Comment #: 3

Comment: The text states that at least 6 inches of below-WAC material will remain in place as a buffer between the maximum depth of the excavation surface and any above-WAC material. As discussed in General Comment 1 above, additional soil samples are needed to verify that at least 6 inches of below-WAC material will remain in place as a buffer between the maximum depth of the excavation surface and any above-WAC material.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 5.1

Page #: 12

Lines #: NA

Original Specific Comment #: 4

Comment: The text proposes to use real-time scanning of the surface of the Pit 4 cap to verify that a single lift of material to be excavated meets the OSDF WAC for uranium. However, the text does not state the depth to which the real-time scan will be accurate. The planned cap excavation depth is 3.5 feet bgs, and past sampling results indicate that above-WAC material is present in some areas of Pit 4 at 4 to 5 feet bgs. The text should be revised to indicate the depth accuracy of the real-time scan and whether it can detect uranium throughout the 3.5-foot-bgs interval.